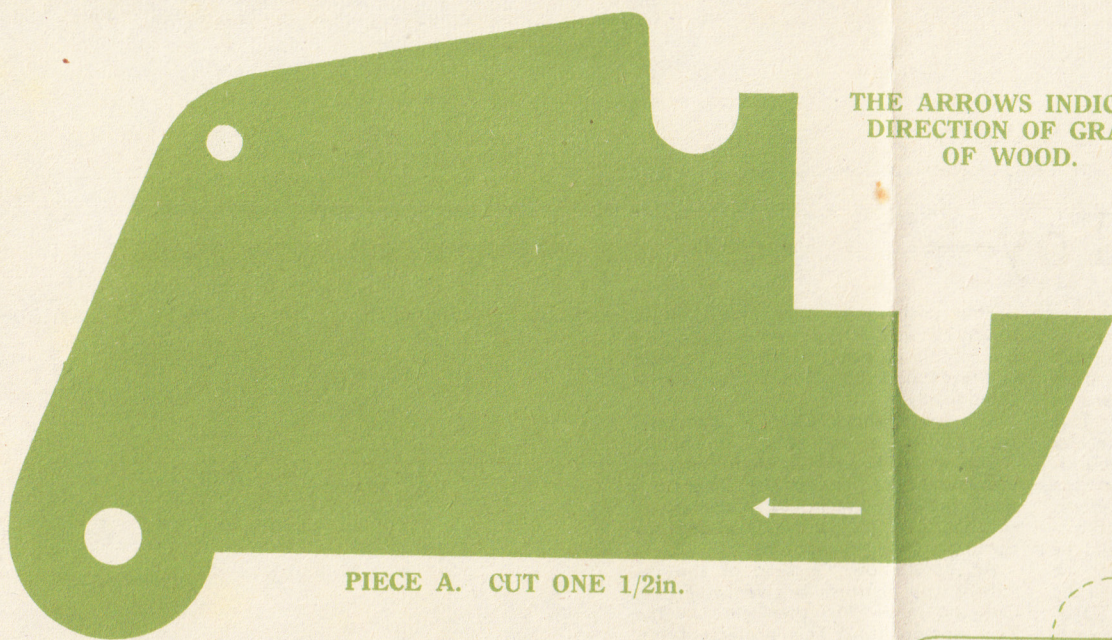




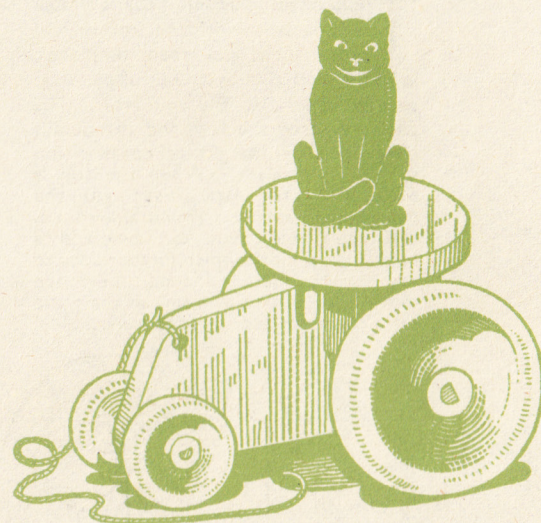
WASHERS J. CUT ONE OF EACH 1/4in. AND GLUE TO AXLE AND 4in. WHEELS.



PIECE A. CUT ONE 1/2in.

THE ARROWS INDICATE DIRECTION OF GRAIN OF WOOD.

SUPPLEMENT TO HOBBIES No. 2870.
THE WALTZING CAT
MECHANICAL PULL ALONG TOY



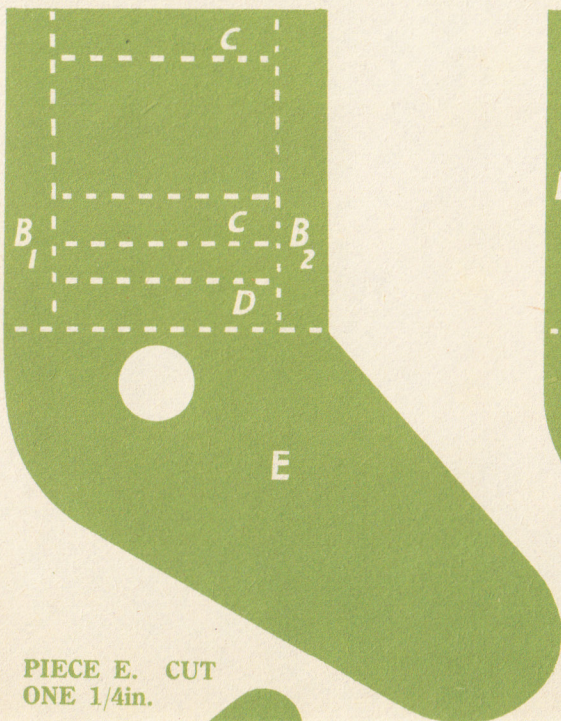
SIZE 9 1/2ins. HIGH, 7 1/2ins. LONG.

PANELS OF WOOD REQUIRED FOR THIS DESIGN

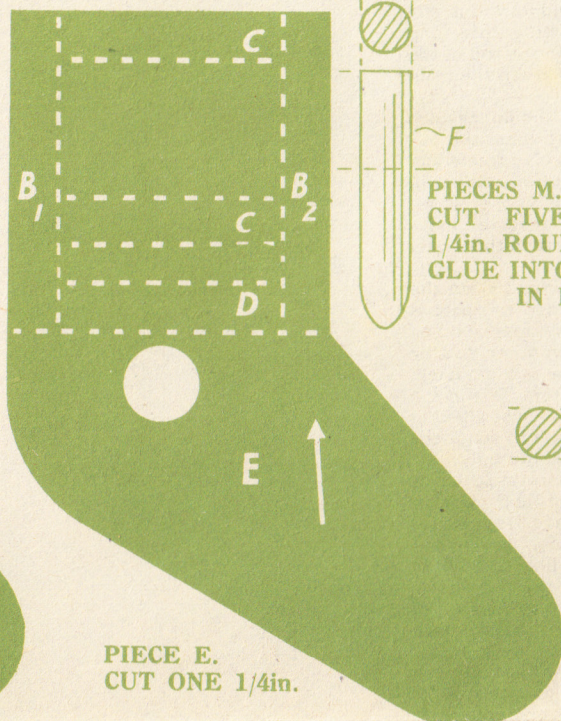
TWO ND 8 ONE G 4

Materials for making this design are supplied by HOBBIES LIMITED, Dereham, Norfolk.

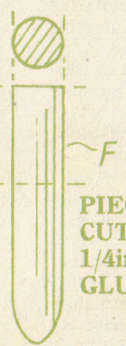
Price on application.



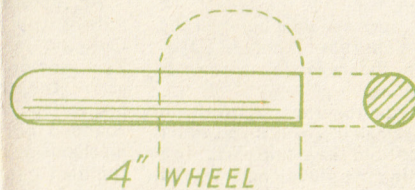
PIECE E. CUT ONE 1/4in.



PIECE E. CUT ONE 1/4in.



PIECES M. CUT FIVE FROM 1/4in. ROUND ROD. GLUE INTO HOLES IN F.



PIECE K. CUT ONE FROM 1/4in. ROUND ROD. A HOLE MUST BE BORED IN ONE OF THE LARGE WHEELS AND PIECE K WEDGED IN TIGHTLY.



SPINDLE L. CUT ONE FROM 1/4in. ROUND ROD. ROUND OFF THE ENDS AND GLUE INTO CENTRE HOLE OF DISC F.

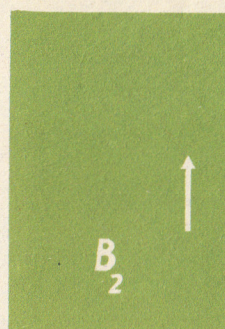
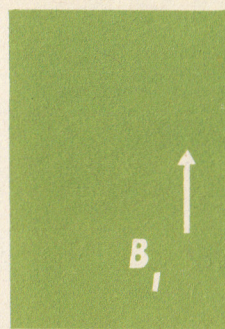


FRONT AXLE N. CUT ONE FROM 1/4in. ROUND ROD.

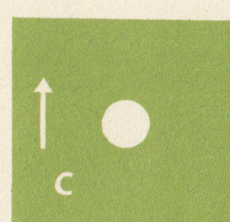
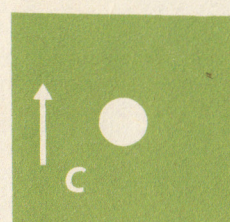
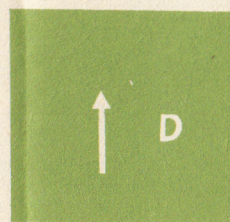


CUT THIS OVERLAY FROM 1/4in. WOOD. ROUND OFF AND GLUE TO CAT.

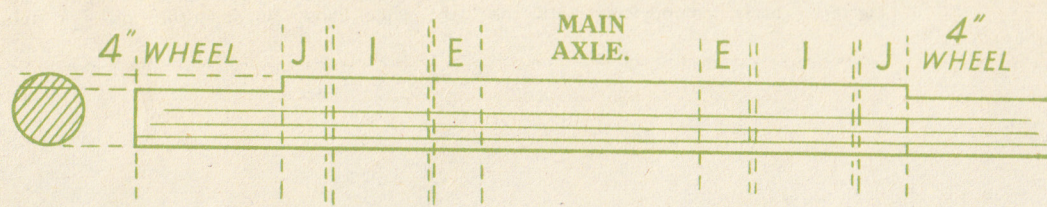
NOTE.—This design sheet is only presented free with the current issue of Hobbies and not with back numbers. Further copies may be obtained.



PIECES B. CUT ONE OF EACH 1/4in.

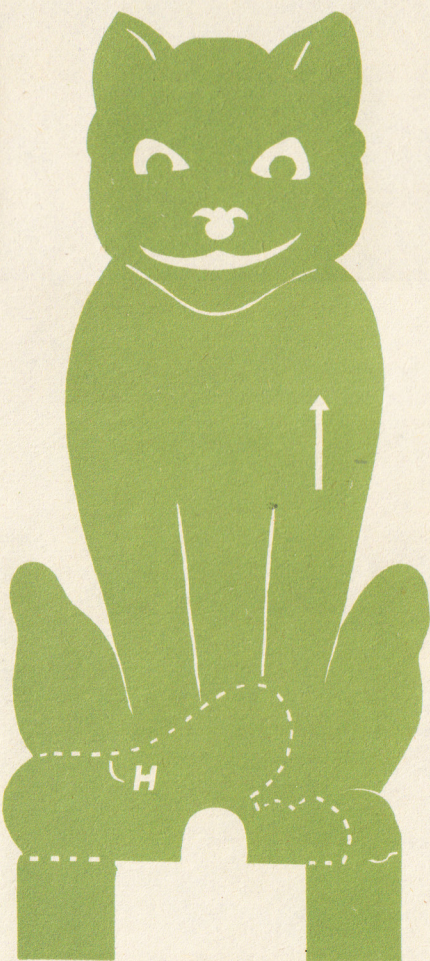


PIECES C AND D. CUT ONE OF EACH 1/4in.

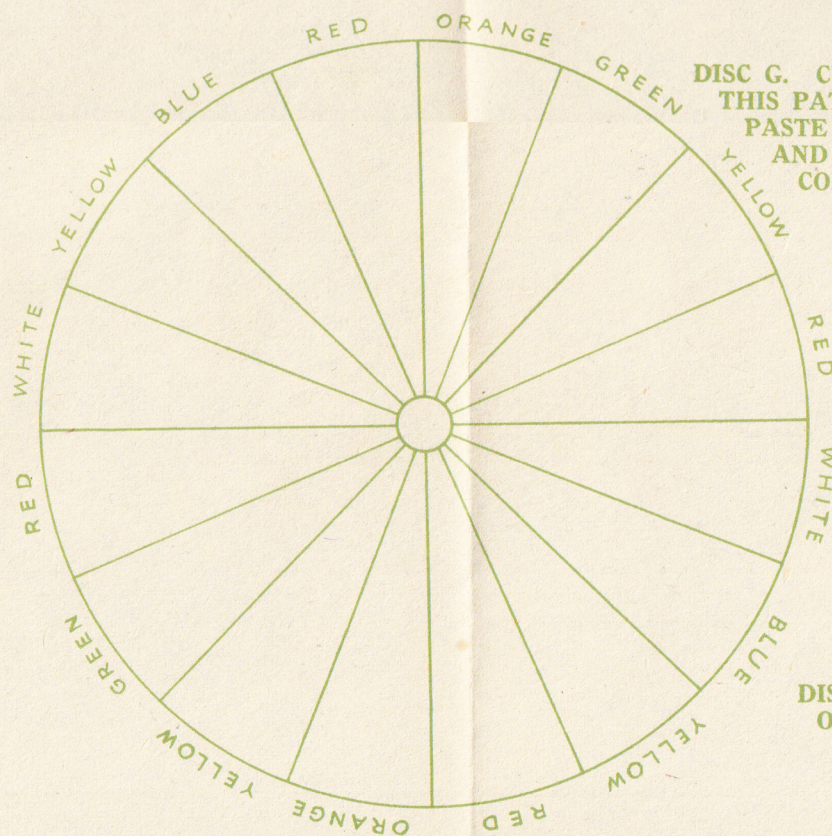


MAIN AXLE. CUT ONE FROM 3/8in. ROUND ROD.

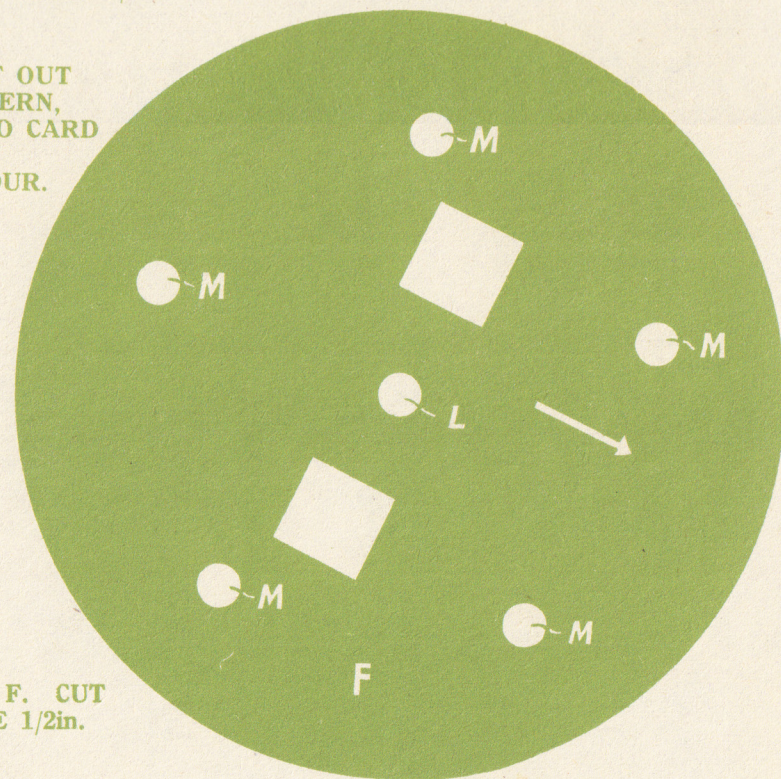
THE CAT. CUT ONE 1/2in. AND PAINT BLACK.



LOOSE WASHERS I. CUT ONE OF EACH 1/2in.



DISC G. CUT OUT THIS PATTERN, PASTE TO CARD AND COLOUR.



DISC F. CUT ONE 1/2in.

The Waltzing Cat Toy—

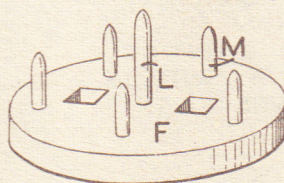
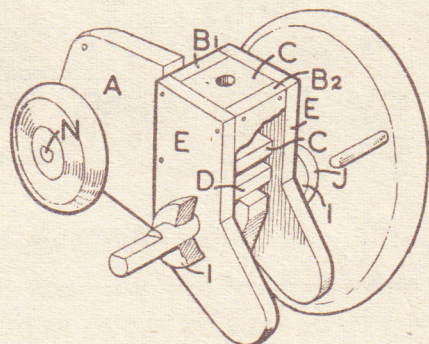
THIS novel mechanical toy is simple to construct with the fretsaw and a few tools, and when completed, is made attractive by colourful painting, such as appeals to any youngster. The parts required are few, and the details herewith show the general construction of the mechanism. When the toy is pulled along, the black cat sitting on the top platform, waltzes round and round.

If you prefer, you can also add a coloured card disc which further adds to the attractiveness. Indeed, there are several alternatives. You can omit the cat altogether and prepare a variety of

main portion of $\frac{1}{2}$ in. stuff at (A).

The box portion which you can see in the cut-away view at Fig. 1 must be made up in the sequence shown. The drop pieces at the back, by the way, are to prevent the toy toppling over if it happens to tip. When making the box of (B), (C), (D) and (E), complete it with the exception of the front portion (B1). The position of the inside pieces (C) and (D) are marked on the pattern of (E). The central hole in (C) should be bored through the two parts at one operation to ensure the hole being in the same position. There is no hole in (D) as the spindle in the revolving top rests upon this piece.

Get the box together (apart from B1), adding small fretnails if you think advisable, to hold the inside parts. The piece (B1) is now glued and screwed to the straight upright edge of piece (A), and then the rest of the partly



discs in colour. These discs, as they revolve, blend into all sorts of shades as different ones are added.

A pattern for one is shown where various shades are depicted. As this revolves, it alters the overall colouring according to the speed of turning. Apart from this type of disc, you can have one with just quarter colours on it, or rings of colour extending from the centre, or a whirl-shaped line, all of which make variety and popularity.

Wood $\frac{1}{2}$ in. and $\frac{1}{4}$ in. thick is required in the construction, with $\frac{1}{4}$ in. and $\frac{3}{8}$ in. dowel rod for axles, spindles, etc. The parts shown by the pattern should be redrawn on to the wood, and then can be cut with the fretsaw, taking care to get all edges straight and smooth. Clean the parts before fitting together. The building can be in the sequence of the lettered parts, commencing with the

constructed box can be put to it and finally glued in place with (D) resting on the projecting bracket of (A) (see Fig. 1).

This should bring the axle holes in all three pieces in line, and the main axle itself can then be fitted. This is a $4\frac{1}{2}$ in. length of $\frac{3}{8}$ in. rod, and the position of the various parts is indicated by the dotted lines. The rod turns loosely in the main framework, with the wheels and washers glued on. Each end of the axle is flattened down a little, which will allow a wedge to be fixed in to prevent it turning in the wheel itself.

Bore the holes on the small side in the wheels, and glue on firmly. Before this, of course, you must have added the $\frac{1}{2}$ in. loose washer and the fixed washer (J) which is glued to axle and wheel. In one of the wheels only a $1\frac{1}{2}$ in. spindle is fitted to project inwards. A hole is bored through the wheel about $\frac{1}{4}$ in. from the rim.

This position is important, and is clearly shown by the dotted indication on the spindle pattern. It can also be seen in the detail at Fig. 1. Get this spindle glued firmly.

The front wheels (2 ins. in diameter) are glued at the end of a $1\frac{1}{2}$ in. spindle which works loosely through the hole previously bored in part (A). There is a space between the inside of the wheel and the part (A), but this allows for turning the toy when pulling.

An upside-down picture of the revolving top platform is given at Fig. 2. Cut the holes (M), then glue in the $2\frac{3}{4}$ in. spindle (L). This projects $1\frac{1}{2}$ ins. above the centre, with the other end projecting about $\frac{1}{2}$ in. and similarly rounded off. You should test out the mechanism now by putting this long spindle (L) into the hole in the top of the toy and seeing it engages when the main wheel turns.

The platform spindle should revolve loosely in the top so that when the toy is pulled along it will revolve freely and at quite good speed when the article is in motion. As there is only one wheel spindle, the top can revolve independently of the rate at which the wheel is turning.

The cat has a small overlay (H) on the front at the foot, and when the part is cut from $\frac{1}{2}$ in. wood you may like to carve it with penknife or other cutting tool, roughly to the shape of a cat itself. The stub joints at the bottom, fit into the holes of the platform but are not glued in place. It should be possible to stand the cat in place with hand pressure only.

The whole thing is complete so far as construction is concerned, and painting can now be undertaken. Use poster paint or bright enamels after having put one coat of flat paint on first to body in the wood. Bright reds and yellows should be introduced, although, of course, the cat itself is black with appropriate colouring for eyes, nose, mouth, etc.

If you have your own particular type of cat, you could probably copy this more or less realistically. The kit provided by Hobbies contains not only the wood, but the necessary wheels and spindle rod for all parts.